

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently amended) A method for logging updates to a plurality of data records into discrete pages in non-volatile storage, wherein a page partially full of data is known as a partial page, said method comprising the steps of:

establishing identical partial pages I and I+1 at the earliest opportunity,
in response to a data segment D larger than the remaining space of a most recent updated partial page I, partitioning D into a first segment D1 sufficient to fill the remaining space of page I and a second data segment D2,
filing page I with a first write operation of its present contents concatenated with D1, and
creating identical partial pages I+1 and [[I-2]] I+2 with a single, second write operation of D2 to both pages, whereby pages I+1 and I+2 become the new pages I and I+1 for the next logging operation.

2. (Original) The method of claim 1 further comprising the step of:

in response to successive data segments D, the first of which is smaller than the remaining space of the most recently updated partial page I, writing page I+1 to the present contents of page I concatenated with D, and thereafter alternating this procedure between pages I and I+1 until a data segment X fills the remaining space of the page containing the most recent update, and at that point writing page I to the value of the most recent update concatenated with the new segment X in a first write operation and writing any remaining part of segment X into both pages I+1 and I+2 in a second write operation.

3. (Currently amended) The method of claim 1 comprising the step of:

in response to successive data segments D, the first of which is smaller than the remaining space of the most recently updated partial page I, writing I+1 to the present contents of page I concatenated with D, and thereafter continuing this procedure into successive pages I+2, [[I-3]] I+3, etc. until a data segment X fills the remaining space of the page containing the most recent update, and at that point writing page I to the value of the most recent update concatenated with the new segment X in a first write operation and writing any remaining part of segment X into both pages I+1 and I+2 in a second write operation.

4. (Original) Apparatus for logging updates to a plurality of data records into discrete pages in non-volatile storage, wherein a page partially full of data is known as a partial page, comprising:

means for establishing identical partial pages I and I+1 at the earliest opportunity;

means responsive to a data segment D larger than the remaining space of a most recent updated partial page I for partitioning D into a first segment D1 sufficient to fill the remaining space of page I and a second data segment D2,

means for filling page I with a first write operation to its present contents concatenated with D1, and

means for updating with a second write operation both pages I+1 and I+2 to D2, whereby pages I+1 and I+2 become the new pages I and I+1 for the next logging operation.

5. (Original) The apparatus of claim 4 further comprising:

means responsive to successive data segments D, the first of which is smaller than the remaining space of the most recently updated partial page I for writing page I+1 to the present contents of page I concatenated with D, and means for thereafter alternating this procedure between pages I and I+1 until a data segment X fills the remaining space of the page containing the most recent update, and means for writing page I to the contents of the page containing the most recent update concatenated with the last received data segment X.

6. (Original) The apparatus of claim 4 further comprising:

means responsive to successive data segments D, the first of which is smaller than the remaining space of the most recently updated partial page I for writing page I+1 to the present contents of page I concatenated with D, and means for thereafter continuing this procedure into successive pages I+2, I+3, etc. until a data segment X fills the remaining space of the page containing the most recent update, and means for writing page I to the contents of the page containing the most recent update concatenated with the last received data segment X.

7. (Original) A storage medium for storing computer program instructions that when loaded into a computer performs the steps of claim 1 or claim 2 or claim 3.

8. (Original) A carrier wave containing computer program instructions that when loaded into a computer performs the steps of claim 1 or claim 2 or claim 3.